

Abstract of the Disclosure

A method and device are provided for automatically generating a key and a conjugate key to be used in an optical code division multiple access system. The method comprises applying a down conversion process to pump input light to thereby produce down converted broadband signal and idler fields that are complex conjugates of each other. The signal and idler fields thus serve as the key and its conjugate. Also provided according to the invention is a method for use in coding/decoding a signal in an optical code division multiple access system.